AMENDMENTS TO THE SPECIFICATION:

At page 27, please amend the first full paragraph as follows:

Fig. 9 is a diagram illustrating the basic concept of an ozone generation method and unit according to the present invention and a reference numeral 71, 71′ indicates a housing that surrounds a low gas pressure area of approximately 3 Pa to 6 Pa and a reference numeral 72, 72′ indicates a hemimorphic crystal which is a single crystal plate made of lithium niobate ($LiNbO_3$) which is installed in such a manner that the surface having positive electricity faces upward (in the direction so as to face the ozone chamber). A reference numeral 73, 73′ indicates a temperature elevating and lowering stage for the heating and cooling crystal plate 72, 72′ in a predetermined period, in which H indicates a heater wire and P indicates a pipe for refluxing the cooling water. A reference numeral 75, 75′ indicates a control unit for controlling the energization and deenergization of this heater and the supply and blockage of the cooling water, and a reference numeral 76 indicates a vessel that form an ozonization chamber into which a gas that includes oxygen (O_2) is introduced from the left of Fig. 9 so that the ozonization reaction progresses within the vessel 76 and a gas that includes ozone (O_3) is discharged to the right. A reference numeral 74, 74′ indicates an active layer having a low work function which is installed between the crystal plate 72, 72′ and temperature elevating and lowering stage 73, 73′ and is appropriately made of magnesium oxide (MgO) or calcium oxide (CaO). This active layer 74, 74′ is made to adhere, and is electrically connected, to the upper surface of the block of the temperature elevating and lowering stage 73, 73′ via an adhesive layer such as a silver paste.

At page 28, please amend the first full paragraph as follows:

The operation where the temperature elevating and lowering stage 73, 73′ is heated by heater H to, for example, approximately 200°C and, after that, the heater is de-energized and at the same time the cooling water is refluxed into the pipe P so that the temperature elevating and the lowering stage is quenched to, for example, approximately room temperature, is repeated in a constant cycle. The temperature elevating and lowering cycle is program-controlled by the temperature control unit 75, 75′.

At pages 28-29, please amend the bridging paragraph as follows:

As a result of this, the temperature of the hemimorphic crystal plate 72, 72′ is repeatedly elevated and lowered between 200°C and room temperature via the active layer 74, 74′ and thereby, the spontaneous polarization within the crystal 72, 72′ progresses causing the upper surface and the lower surface of the crystal to alternately become a high potential surface. As a result, an intensive electric field is generated around the crystal and the characteristic x-rays originated from the elements that form the crystal are generated from the surface of this crystal due to an excitation function caused by this intensive electric field. It is desirable for the temperature cycle in this case to be a period where heating and cooling are repeated at approximately 5 minute to 10 minute intervals. In accordance with the experiments conducted by the present inventors, in the case of an $LiNbO_3$ crystal, the white x-rays having a continuous energy are generated together with the characteristic x-rays of the crystal forming elements, that is to say, niobium (Nb), lithium (Li) and oxygen (O) during the process of lowering the temperature. These x-rays having a low energy are generated and radiated from the surface of the crystal in every direction as shown by X in Fig. 9, and then, reaches an ozonization chamber 76 through an x-ray transmission window 71a,

71a′ (only this portion is made of, for example, a beryllium film) in an upper portion of the housing 71, 71′ which holds a low pressure gas atmosphere inside. In addition, charged particles such as electrons are discharged from the active layer 74, 74′ due to an intensive electric field generated through the thermal excitation of the crystal 72, 72′ and such electrons are accelerated by the above described electric field and collide with a microscopic amount of gas molecules within the housing 71, 71′ so as to generate the x-rays, and therefore, these x-rays also contribute to the ozonization reaction in the ozonization chamber.

At pages 29-30, please amend the bridging paragraph as follows:

Here, Fig. 9 illustrates an example where an x-ray generation part, denoted by 71, 71′, 72, 72′, 73, 73′, ~~and~~ 74 and 74′, which repeatedly heats and cools a hemimorphic crystal plate periodically (thermal excitation) is additionally installed above the ozonization chamber 76, in order to enhance the efficiency of ozonization by irradiating the ozonization chamber with the x-rays of which the amount is twice as large. In this case, the heating and cooling cycle (thermal excitation cycle) is controlled so as to provide opposite phases in such a manner that when one crystal plate 72 is in the rising temperature phase of the cycle, the other crystal plate 72′ is in the lowering temperature phase of the cycle, and thereby, the x-rays are alternately projected into the ozone generation part, and thus, the x-rays can be efficiently and continuously generated. Of course, it is also possible to control the thermal excitation cycle of the two crystals in the same phase, and in such a case, the x-rays of which the amount is twice as large are radiated intermittently to the ozone generation part according to the same timing. It is clear that a great amount of ozone can be continuously generated by installing the x-ray generation parts as described above as four points, six points or the like in the case where the ozonization chamber is larger. In such a case, the object of the present invention can be achieved even when the active layer 74, 74′ is not specially provided.